## PROGRESS REPORT OF WOLF POPULATION MONITORING IN WISCONSIN FOR THE PERIOD OCTOBER - DECEMBER 2001

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During fall 2001, 42 wolves were being monitored in 32 or 33 packs on October 1. At least one was a disperser and 4 were translocated wolves moving about. Four collared wolves died, 2 signals were lost, and one wolf slipped its collar. A total of 35 wolves were captured by DNR and USDA-Wildlife Services in 2001, and 24 were fitted with radio collars. Seventeen cases of wolf depredation were reported for 2001. During 2001, 26 wolves were found dead in Wisconsin, including 14 radio-collared wolves.

The enclosed report provides a summary of wolf monitoring activity in Wisconsin for the period of October through December 2001, and annual summaries for mortalities and depredations for the year 2001. A more thorough report on winter surveys will be completed in spring 2002, along with an estimation of the winter wolf population.

Gray wolves have been listed as a state threatened species since October 1, 1979, and a new management plan was approved on October 27, 1999. Wolves have been federally listed as endangered since 1974, but are currently being considered for reclassification and may be downlisted to federally threatened in spring 2002. Last winter 251 wolves were counted in 66 packs across the state, but summer surveys indicated that at least 70 packs existed last winter. These would have consisted of at least 257 wolves, and 249 wolves outside of Indian reservations in 2001.

Many people assisted on wolf surveys in Wisconsin. A more complete list will occur in the spring survey report. Aerial monitoring of collared wolves was done by DNR pilots Phil Miller, Joe Sprenger, John Bronson, Paul Anderson, John Jorgenson and Mike Weinfurter. Trapping and howl surveys by DNR personnel were conducted by Ron Schultz, Bruce Kohn, Dick Thiel, Wayne Hall, Sarah Boles, Ken Jonas, Rich Wissink, Greg Kessler, Todd Naas, Bruce Bacon and Michele Kastler. Kerry Beheler coordinated wolf health monitoring for the DNR. Dr. Kim Miller and Dr. Grace McLaughlin coordinated necropsies, and Dr. Nancy Thomas conducted necropsies at the National Wildlife Health Center in Madison. Local DNR and U.S. Forest Service biologists assisted on local surveys. Randy Jurewicz coordinated the depredation control program, wolf carcass transports and disposals. Bob Willging supervised USDA-Wildlife Service personnel in investigating and live-trapping of problem wolves in northern Wisconsin, and Scott Beckerman supervised personnel in southern Wisconsin.

Funding for wolf monitoring was from U.S. Fish and Wildlife Service endangered species grants; Federal Aid in Wildlife Restoration (Project W-154R, PR Funds); Chequamegon-Nicolet National Forests; Wisconsin Endangered Resources Fund; Timber Wolf Alliance; Adopt-A-Wolf Pack; Timber Wolf

Information Network; Zoopride (Milwaukee Zoo); Defenders of Wildlife; individual donated collars (see Appendix A); and contributions from the general public.

Collared wolves were monitored in 32 or 33 Wisconsin packs and 1 Minnesota pack (wolf 298M) (Table 1). Thus collared wolves occurred in 46 or 47% of the state wolf packs in the beginning of October 2001. In the beginning of October, 42 wolves were on the air, and by the end of December 2001, 35 remained on the air. Losses during the quarter included 4 deaths (269M, 294M, 342M, 348M), 2 loss of signals (289F, 368M), and 1 collar slipped (245F). Three of the mortalities were from shootings, and one was caused by other wolves; 3 wolves died in the central forest and one in the northwoods. Two wolves (343M, 376F) seemed to be mainly loner/dispersing wolves during the quarter. Wolves 393F, 394M, 395M and 724F were translocated wolves that moved extensively as loners, but 395M and 724F eventually moved together to form a new territory in northwest Langlade County.

Twenty-four of thirty-five wolves live-captured in 2001 were fitted with radio collars (Table 2). Eight wolves were live-captured by USDA-Wildlife Services from a farm in Burnett County receiving depredation on calves; 7 wolves were translocated long distances (116 to 170 miles) and one was moved a short distance from the farm (3.5 miles). Three of four pups died within a few weeks of release into the wild, but one pup remained alive at the end of the period (393F). Twenty-seven wolves were live-captured by DNR, and 16 were fitted with radio collars. One wolf died soon after release from aspiration of food items while recovering from being tranquilized.

Seventeen cases of wolf depredation were reported for 2001 (Table 3). Total payments were likely to exceed the \$38,769.48 listed in Table 3 because 2 cases were still pending.

Livestock/poultry depredation occurred on 5 farms in Burnett, Douglas, Price, Sawyer and Washburn counties. Highest losses occurred on 74 poultry on 2 different farms. Calves were killed on 3 farms, with single losses on 2, and 9 killed on a third farm. The farm with 9 losses has lost calves every year since 1995, except 1999 when a shock collar kept the alpha female (724F) off of the farm. Eight wolves were live-captured off the farm in 2001 and 7 were translocated across the state. The lactating female (367F) of this pack was released near the farm but was fitted with a shock collar and a radio collar; remote triggering devices were used to send shocks when she approached within 0.25 miles of the devices, and kept her off the farm.

Wolf depredation occurred on dogs, with 17 killed and 1 injured. Fifteen of the dogs killed were hounds used to hunt or track bear, and 2 kills were hounds used for bobcat hunting. One dog was injured at a farm where poultry were killed. Seven packs were involved in dog depredation; 3 new packs (Casey Creek, Siskiwit Lake and Pelican Lake) accounted for 11 dog deaths (65%).

One case of human health concern occurred in June when a wolf spending time along Highway 53 in northern Washburn County began darting at vehicles. A permit was issued by the U.S. Fish and Wildlife Service to kill the wolf. Trapping was attempted, but the wolf disappeared soon after trapping began.

Twenty-six wolves were found dead during 2001, including 14 radio collared wolves. Causes of death included 8 vehicle collisions, 7 shootings, 3 intraspecific strife, 4 sarcoptic mange and other illness, 2 pneumonia, 1 capture related and 1 unknown. Mortality among collared wolves was 4 mange and other infection, 4 shootings, 2 pneumonia, 2 intraspecific strife, 1 vehicle collision and 1 capture related. Among all mortalities, 16 (62%) were human-caused, and among radio collared wolves, 6 were human caused (43%). Collared animals generally provided a better indication of overall mortality rates. Only 1 of 14 collared wolves died from vehicle collisions, but 7 of 12 non-collared wolves died from vehicle collisions. Illegal shooting was higher than any previous year, and represented 31% of known mortality among collared

wolves. Increased illegal kill may indicate reduced human tolerance as the wolf population expands, or more wolves moving into areas where they are at a greater risk of being shot.

## Plans for Next Quarter

Aerial monitoring will continue, with attempts to obtain several complete counts on collared wolf packs. Aerial telemetry will also be used to determine the extent of areas roamed by collared packs. Snow tracking will be done by DNR trackers and volunteers on all non-collared packs, and will be used to locate lone wolves. Using territorial mapping of collared and non-collared packs, the wolf population will be estimated for northern and central Wisconsin in April.

Table 1. Radio-collared wolves monitored in northern and central Wisconsin October - December 2001.

Wolf Number	A ge <sup>a</sup>		Counties Counties	Date Captured	Last Date	Locations <sup>b</sup>
M036F	Y	West Firelane	Ashland/Iron	4 May 00 <sup>c</sup>	Ongoing	40
241F	P	Ghost Lake	Bayfield/Sawyer	20 Nov 97 <sup>d</sup>	Ongoing	201
245F	P	Hoffman Lake	Iron/Ashland/Price	30 Jul 97	20 Nov 01 <sup>e</sup>	222
248M	A	Torch River	Ashland	28 Jun 00	Ongoing	77
250M	P	Ghost Lake	Bayfield/Sawyer	9 Sep 00	Ongoing	67
268M	Y	Truck Trail	Douglas/Pine	11 Jun 97 <sup>f</sup>	Ongoing	326
269M	A	Noch Hanai/Pray?	Jackson/Clark	13 Jul 01 <sup>g</sup>	19 Nov 01 <sup>h</sup>	125
285F	A	Ranger Island	Lincoln	24 Aug 98	Ongoing	174
286F	Y	Brunet River	Sawyer	5 Sep 98	Ongoing	167
289F	A	Pioneer Creek/Loner?	Vilas	26 Apr 00i	1 Nov 01 <sup>j</sup>	273
291M	A	Chain Lakes	Doug/Washb/Sawy/Bayf.	27 Jun 99	Ongoing	138
292M	Y	Tranus Lake	Washburn	21 May 99	Ongoing	148
294M	A	Totagatic River	Douglas/Burnett	23 May 99	11 Oct 01 h	134
295F	Y	Totagatic River	Douglas /Burnett	25 May 99	Ongoing	149
296M	Y	Crotte Creek	Douglas	28 May 99	Ongoing	145
297M	A	South Empire	Douglas	2 Jun 99	Ongoing	143
298M	Y	Tamarack River, MN	Douglas/Pine	8 Jun 99	Ongoing	139
300F	A	Harrison Hills	Lincoln	18 May 01	Ongoing	35
309F	P	Iron Run	Clark/Eau Claire	15 Nov 99	Ongoing	135
M310M	P	Brush Creek	Ashland	2 Nov 97 <sup>k</sup>	Ongoing	145
311F	Y	Bear Bluff	Jackson/Wood/Juneau	24 Sep 00	Ongoing	288
316F	A	Wintergreen	Price	20 Oct 99	Ongoing	115
332F	A	Pelican Lake	Oneida/Langlade	$10 \text{ May } 00^{l}$	Ongoing	105
336M	Y	Bootjack Lake	Price/Oneida	3 Jun 01	Ongoing	29
338M	P	Bear Bluff	Jackson	28 Jul 01	Ongoing	28
340F	A	Yellow River/Beaver Creek	Juneau	5 Aug 01	Ongoing	26
341F	Y	Wildcat Mound/Disperser	Jackson/Monroe/Wood	31 May 01	Ongoing	37
342M	A	Suk Cerney	Juneau	16 Aug 01	19 Nov 01 <sup>h</sup>	18
343M	A	Disperser	Wood/Jackson/Juneau	12 Jun 01	Ongoing	36
348M	A	Dead Creek	Jackson	23 May 01	19 Nov 01 <sup>h</sup>	33
351M	A	Chippewa River	Ashland/Iron	17 Jun 00	Ongoing	77
355M	A	North Willow	Oneida	28 Jun 01	Ongoing	28
367F	A	Chase Brook	Burnett	26 May 01	Ongoing	36
368M	A	Price Creek	Price	12 Jul 01	17 Oct 01 <sup>j</sup>	13

Table 1. cont.

Wolf Number	Age	<sup>a</sup> Pack/Area	Counties	Date Captured	Last Date	Locations <sup>b</sup>
369F	A	Siskiwit Lake/Little Sioux	Bayfield	25 Jun 01	Ongoing	26
370F	A	Black Lake	Ashland/Sawyer	30 Jun 01	Ongoing	25
376F	Y	Disperser	Oneida/Lincoln/Price	12 Jun 01	Ongoing	34
388M	A	Crex Meadow	Burnett	25 Jul 01	Ongoing	24
393F	P	Translocated	Oneida/Price	31 Jul $01$ <sup>m</sup>	Ongoing	20
394M	Y	Translocated	Forest/Florence/Marinette	5 Aug 01 <sup>n</sup>	Ongoing	28
395M	A	Translocated	Forest/Oneida/Lincoln	16 Aug 01°	Ongoing	34
724F	A	Translocated	Forest/Oneida/Lincoln	16 Aug 01 <sup>p</sup>	Ongoing	362

<sup>&</sup>lt;sup>a</sup>Age at time of capture (P = Pup, Y = Yearling, A = Adult)

<sup>&</sup>lt;sup>b</sup>Total locations from the time of capture

<sup>&</sup>lt;sup>c</sup>Captured in Gogebic County, Michigan

<sup>&</sup>lt;sup>d</sup>Recaptured wolf, first captured in Ashland County on 23 Jun 1997, 19 lb. pup too small to collar

<sup>&</sup>lt;sup>e</sup>Lost collar

<sup>&</sup>lt;sup>f</sup>Recaptured wolf; first captured as a pup in Douglas County on 28 Aug 1996

<sup>&</sup>lt;sup>g</sup>Recaptured wolf; first captured as a pup in Jackson County on 17 Sep 1999

<sup>&</sup>lt;sup>h</sup>Mortality

<sup>&</sup>lt;sup>i</sup>Recaptured wolf, first captured in Douglas County on 5 Jun 1998, captured in deer farm in Oneida County, relocated to Florence Cty.

<sup>&</sup>lt;sup>j</sup>Lost signal

<sup>&</sup>lt;sup>k</sup>Captured in Houghton County, Michigan

<sup>&</sup>lt;sup>1</sup>Captured in deer farm in Oneida County, relocated to Forest County

<sup>&</sup>lt;sup>m</sup>Captured by Wildlife Services, relocated to Oneida County 28 Aug 2001

<sup>&</sup>lt;sup>n</sup>Captured by Wildlife Services, relocated to Forest County 21 Aug 2001

<sup>°</sup>Captured by Wildlife Services, relocated to Forest County 11 Sep 2001

<sup>&</sup>lt;sup>p</sup>Captured by Wildlife Services, relocated to Forest County 11 Sep 2001. Recaptured wolf; first captured in Douglas Cty 28 May 1997

Table 2. Wolves captured and radio-collared in Wisconsin in 2001.

Wolf Number	Sex/Age <sup>a</sup>	Weight (lbs)	Pack/Area	County Captured	Date
269	M/A	71	Noch Hanai/Pray?	Clark	13 Jul 01
300	F/A	72	Harrison Hills	Lincoln	18 May 01
312 <sup>b</sup>	M/P	40	Bear Bluff	Jackson	17 Jul 01
336	M/Y	~80	Bootjack Lake	Oneida	03 Jun 01
338	M/P	44	Bear Bluff	Jackson	28 Jul 01
339 <sup>b</sup>	F/P	35	Bear Bluff	Jackson	28 Jul 01
340	F/A	74	Yellow River	Juneau	05 Aug 01
341	F/Y	54	Wildcat Mound	Jackson	31 May 01
342	M/A	75	Suk Cerney	Juneau	16 Aug 01
343	M/A	92	Unknown	Juneau	12 Jun 01
344 <sup>b</sup>	F/P	23	Suk Cerney	Juneau	15 Aug 01
345 <sup>b</sup>	F/P	25	Suk Cerney	Juneau	15 Aug 01
347 <sup>b</sup>	F/P	24	Suk Cerney	Juneau	16 Aug 01
348	M/A	72	Dead Creek	Monroe	23 May 01
349 <sup>b</sup>	F/P	30	Bear Bluff	Jackson	25 Jul 01
$350^{b}$	F/P	32	Bear Bluff	Jackson	26 Jul 01
352°	F/A	72	Chase Brook	Burnett	01 May 01
355	M/A	81	North Willow	Oneida	28 Jun 01
$360^{b}$	M/P	20	Casey Creek	Douglas	18 Jun 01
361 <sup>b</sup>	F/P	22	Casey Creek	Douglas	21 Jun 01
366 <sup>b</sup>	M/P	19	Little Sioux/Siskiwit Lake	Bayfield	20 Jun 01
367 <sup>d</sup>	F/A	80	Chase Brook	Burnett	26 May 01
368	M/A	81	Price Creek	Price	12 Jul 01
369	F/A	67	Little Sioux/Siskiwit Lake	Bayfield	25 Jun 01
370	F/A	72	Black Lake	Sawyer	30 Jun 01
376	F/Y	62	Little Rice River area	Oneida	12 Jun 01
388	M/A	80	Crex Meadow	Burnett	25 Jul 01
389 <sup>b</sup>	F/P	24	Crex Meadow	Burnett	25 Jul 01
390 <sup>e</sup>	F/P	26	Relocated	Burnett	30 Jul 01
391 <sup>e</sup>	M/P	22	Relocated	Burnett	27 Jul 01
392 <sup>e</sup>	M/P	24	Relocated	Burnett	25 Jul 01
393 <sup>e</sup>	F/P	22	Relocated	Burnett	31 Jul 01
394 <sup>f</sup>	M/Y	62	Relocated	Burnett	05 Aug 01
395 <sup>f</sup>	M/A	78	Relocated	Burnett	16 Aug 01
724 <sup>f</sup>	F/A	76	Relocated	Burnett	16 Aug 01

<sup>&</sup>lt;sup>a</sup> Age at time of capture assuming birth date 1 April (P = Pup, Y = Yearling, A = Adult)

<sup>&</sup>lt;sup>b</sup> Not collared, too small.

<sup>&</sup>lt;sup>c</sup> Captured by DNR, fitted with shock collar.

<sup>&</sup>lt;sup>d</sup>Captured by Wildlife Services on farm, fitted with shock collar and released off farm.

<sup>&</sup>lt;sup>e</sup> Captured by Wildlife Services on farm, relocated to Oneida County for cross fostering.

<sup>&</sup>lt;sup>f</sup> Captured by Wildlife Services on farm, relocated to Forest County.

Table 3. Wolf depredation cases on livestock and pets in Wisconsin in 2001.

Date	Animal Lost	Pack Involved	County	Payments	Other Actions
3/8	51 chickens, 1 turkey, 4 pheasant	Loner or Hybrid	Sawyer	\$3,631.90	None
5/18 & 7/17	9 calves	Chase Brook	Burnett	Pending	8 livetrapped by WS, 1 released locally 7 translocated
6/5	Human health &safety	Loner or Hybrid?	Washburn	None	Trapping by WS, unsuccessful
7/5	1 dog (Plott)	Little Sioux R./ Siskiwit Lake	Bayfield	\$500	None
7/18	2 dogs (Walker, Plott)	Little Sioux R./ Siskiwit Lake	Bayfield	\$4,500	None
7/21	1 dog (Walker)	Shoberg Lake	Douglas	\$2,500	None
7/29	1 dog (Walker)	Shoberg Lake	Douglas	\$2,500	None
8/4	1 calf	Spirit Lake	Price	\$475	None
8/6	1 calf	Tranus Lake	Washburn	\$600	None
8/13	1 dog (Walker)	Kidrick Swamp	Taylor	\$2,500	None
8/21	1 dog injured (Terrier) 9 chickens 8 turkeys 1 guinea	Moose Lake or Loner	Douglas	\$290.98	None
9/7	5 dogs (4 Plott, 1 Walker)	Casey Creek	Douglas	\$12,000	None
9/9	1 dog (Bluetick)	Bird Sanctuary	Douglas	\$1,500	None
9/16	1 dog (Redbone)	Little Sioux R./ Siskiwit Lake	Bayfield	\$2,000	None
9/22	2 dogs (Walker)	Tranus Lake	Washburn	Pending \$2,500	None
12/17	1 dog (Redbone)	Pelican Lake	Oneida	\$1,620	None
12/25	1 dog (Walker)	Pelican Lake	Oneida	\$1,651.60	None
17 cases	102 animals killed 1 animal injured	9-10 packs 2-3 loners or hybrids	8 counties 5 farms	\$38,769.48	8 livetrapped 7 translocated 1 released locally
	11 calves killed 17 dogs killed 1 dog injured 60 chickens killed 9 turkeys killed 4 pheasant killed 1 guinea killed				

Table 4. Wolf mortality in Wisconsin in 2001.

Date	Wolf Number	Age/Sex	County	Cause
01/12/01	NC	AM	Douglas	Vehicle collision
02/14/01	W229	8YrF	Ashland	Ear infection/Mange
02/14/01	W282	3YrF	Oneida	Shooting
02/14/01	W293	AF	Washburn	Mange
03/09/01	0071(MI)	PF	Jefferson	Vehicle collision
04/29/01	NC	AM	Bayfield	Vehicle collision
05/01/01	W352	AF	Burnett	Aspirated food, trapping related
06/05/01	NC	AF	Douglas	Vehicle collision
08/07/01	NC	AF	Price	Vehicle collision
08/26/01	NC	AM	Price	Other Wolves?
09/03/01	W392	PM	Oneida	Pneumonia
09/06/01	NC	P?	Bayfield	Vehicle collision
09/12/01	W390	PF	Oneida	Pneumonia
09/17/01	W391	PM	Oneida	Other wolves?
09/19/01	NC	P?	Iron	?
09/30/01	NC	AF	Iron	Vehicle collision
10/11/01	W294	AM	Burnett	Shooting?
10/27/01	NC	AF	Price	Shooting
11/19/01	W269	2YrM	Clark	Shooting
11/19/01	W348	AM	Jackson	Other wolves?
11/19/01	W342	AM	Juneau	Shooting
11/19/01	NC?	AF	Douglas	Shooting
11/20/01	NC	AM	Lincoln	Vehicle collision
11/30/01	W187	8YrF	Douglas	Mange
12/18/01	M0029	?F	Vilas	Mange?
12/27/01	NC	YF?	Price	Shooting

## APPENDIX

	Nicknames used for radio-collared wolves						
Wolf No.	Sex	Age <sup>a</sup>	Status	Nickname	Sponsor		
M036	F	A(2yrs)	Alpha		MI DNR		
241	F	A(4yrs)	Alpha?	Marry			
245	F	A(4yrs)	Alpha	Jody			
248	M	A(≥3yrs)	Alpha	Grady			
250	M	Y(1yr)	Subordinate	Wundo			
268	M	A(5yrs)	Alpha	Barker			
269	M	A(2yrs)	Subordinate?	Mike			
285	F	A(≥4yrs)	Alpha	Shelli			
286	F	A(4yrs)	Alpha?	Raven	Greg Topp		
289	F	A(≥5yrs)	Subordinate	Journey	Dave Mech		
291	M	A(≥4yrs)	Alpha?	Sase			
292	M	A(3yrs)	Subordinate	Daniel			
294	M	A(≥4yrs)	Alpha	Joseph			
295	F	A(3yrs)	Alpha	Jesse			
296	M	A(3yrs)	Subordinate?	Wag			
297	M	A(≥4yrs)	Alpha?	Albert			
298	M	A(3yrs)	Subordinate	Max			
300	F	A(≥2yrs)	Alpha?	Rose			
309	F	A(2yrs)	Alpha?	Ann			
M310	M	A(4yrs)	Alpha?	Cayuga	MI DNR		
311	F	A(2yrs)	Subordinate	Severina	Dave Mech		
316	F	A(≥4yrs)	Subordinate?	Jane			
332	F	A(≥3yrs)	Alpha	Pam			
336	M	Y(1yr)	Subordinate	Kapu	Chelsea Nehm		
338	M	$P(\leq 1 \text{yr})$	Subordinate	Kirby			
340	F	A(≥2yrs)	Alpha?	Ellen			
341	F	Y(1yr)	Subordinate	Rebecca			
342	M	A(≥2yrs)	Alpha?	Gunner			
343	M	A(≥2yrs)	Subordinate	Sasquatch			
348	M	A(≥2yrs)	Alpha?	Howler			
351	M	A(≥3yrs)	Alpha?	Jay			
355	M	A(≥2yrs)	Alpha	Brett			
367	F	A(≥2yrs)	Alpha	Julie			
368	M	A(≥2yrs)	Alpha	JK			
369	F	A(≥2yrs)	Subordinate?	Crystal			
370	F	A(≥2yrs)	Subordinate	Lena			
376	F	Y(1yr)	Subordinate	Leah	Marshall Middle School		
388	M	A(≥2yrs)	Alpha	James			
393	F	P(<1yr)	Subordinate	Nora			
394	M	Y(1yr)	Subordinate	Riley			
395	M	A(≥2yrs)	Subordinate	Karl			
724	F	$A(\geq 6yrs)$	Subordinate	Kara			
a A go as of 1	N. ( 2001						

<sup>&</sup>lt;sup>a</sup>Age as of 1 May 2001